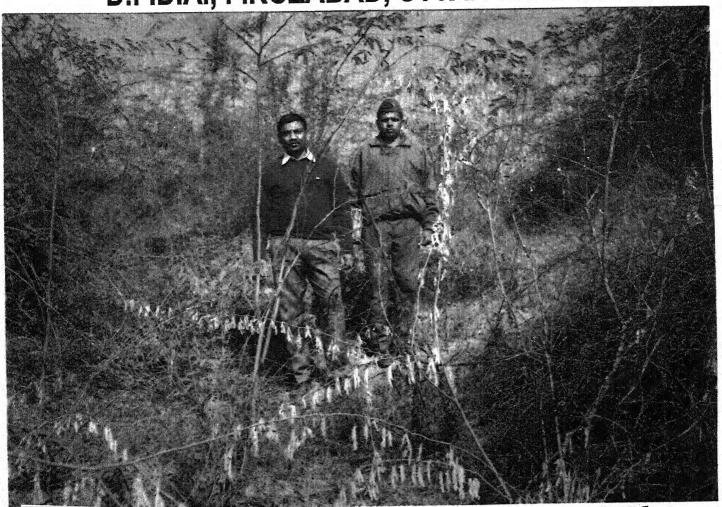
(383)

EVALUATION OF SAMANVIT GRAM VANIKARAN SAMRIDDHI YOJANA (SGVSY) UNDERTAKEN BY D.F.D.A., FIROZABAD, UTTAR PRADESH



Effective Afforestation in Basai Mohammadpur Village

Sponsored by:

of the Chief Conservator of Forests

Social Forestry, Uttar Pradesh, Lucknow

3.83.88

Conducted by:

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GIRI INSTITUTE OF DEVELOPMENT STUDIES
Sector O, Aliganj Housing Scheme

LUCKNOW 226 024 February 2007

63U.9 JAF

DISTRICT FIROZABAD DISTRICTETAN RIVER SINSE **TUNDLA** JASRANA RIVER VAMUNA FIROZABAD SHIKOHABAI FARUKHABAD DISTRICT AGRA PROJECT AREA 18 **KILOMETER** SOURCE: BASED UPON MAP OF FDA-FIROZABAD

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ANNEXURE

EXECUTIVE SUMMARY AND GRADING OF THE PROJECT FOREST DEVELOPMENT AGENCY (FDA) FIROZABAD

| | GRADING PROJECT ON A SCALE OF 1 TO 10 | · |
|---------------------|--|------|
| Quantitative | Physical | 10.0 |
| Aspects | Financial | 10.0 |
| | Survival | 8.0 |
| Qualitative Aspects | Health of Plantations | 8.5 |
| | Maintenance | 8.5 |
| | Sustainability | 8.0 |
| | Degree of People's Participation | 8.0 |
| JFM | Satisfaction Over Perceived Benefits by the Local Population | 8.0 |
| | Composition of General and Executive Bodies of the FDA | 8.0 |
| | Role of FDA in Administrative, Supervisory and Monitoring Mechanism of the Project | 9.0 |
| FDA Mechanism | Flow of Funds from FDA to VFCs | 10.0 |
| | Planning Implementation and Maintenance of Assets Directly by VFCs/EDCs | 8.5 |
| e (| Measures Taken for the Capacity Building of VFCs/EDCs | 8.5 |

| Overall Grading of the | Outstanding (8-10) | Very Good (5-8<) | Good (3-<5) | Poor (<3) |
|------------------------|--------------------|---------------------|----------------|-----------|
| Project Project | 8.50 | - | | - |

Source: Based on observation in the field.



Evaluation meeting in Niyamatpur Village



Afforestation in Gurukuwan Village

EXECUTIVE SUMMARY

To empower village communities at grassroots level, Ministry of Environment and Forest, Government of India in the beginning of Tenth Five Year Plan launched the National Afforestation Programme (NAP). Through a two tier decentralized mechanism the National Afforestation Programme has been implemented by the Forest Development Agencies (FDA) at the forest division level and Joint Forest Management Committee (JFMC) at the village level. A brief findings of evaluation has been mentioned below:

PROFILE OF PROJECT AREA:

- Firozabad Forest Division, which covers the entire district of Firozabad in western Uttar Pradesh. Total geographical area of the division is 2361 Sq. km. and about 86.11 Sq. Km or 3.65 per cent of its total area comes as forest area. The total ravine area in Firozabad district in 45.32 per cent, where as 97.55 per cent of total forest area is ravenous. About 75.08 per cent area of the district is under agriculture.
- River Yamuna passes through the western border of the district. River Yamuna and its tributaries are responsible for the formation of ravines in most of the area of the district. Most of the tributaries of river Yamuna are running north-west to south-east and the entire area is well drained. The rivers are mostly meandering and carrying finer sediments, which are usually deposited in the deep interiors at the time of floods. Ravined areas are generally without cultivation where wild shrubs grow and are commonly used for grazing. The soils are loam to clay loam in texture and neutral to mildly alkaline in reaction, the peripheral lands are free from carbonates and ph. ranges from 7.5 to 8.0 and are immature with no significant profile development.
- The climate is tropical which can be divided into three seasons. Winter season from November to February, long hot summer season from March to June and Monsoon season from July to September. December and January are in coldest months which sometimes temperature go below Zero and are quite severe with occasional frost. Summer months are extremely hot, "Loo" blows throughout the day and murcary shoots upto 48°C with dust

- storms occurring quite frequently. Most of the rains are received during three months and rest of the year is dry except occasional light showers during winter seasons.
- In project area majority of population belongs to Other Backward Castes i.e. 65.20 per cent, other castes 25.63 per cent and Scheduled Castes 9.17 per cent. Scheduled Caste Women, landless labourers and other weaker section of the society were the maximum beneficiaries of the project.

FINDINGS OF THE STUDY:

- The reference period of the project was consecutive five years i.e. 2000-01 to 2004-05.
- ❖ Total Target area to be treated in this project was 2000 hectare and by the end of 2004-05 the physical achieved was cent per cent.
- The total project cost was earmarked as Rs.407.27 lakh and by the end of 2004-05 financial year, an amount of Rs.403.31 lakh (99.03%) was received by the project authority.
- ❖ The project area covers the forest land belongs to reserve forest category.
- During 2001-03 creation work was undertaken and the important species were prosopis, Babool, Alenthis, Neem, Sheeham, Kanjee etc. Total 2,200,000 plants under artificial regeneration were planted.
- ❖ Project work generated overall employment of 473,556 mandays. Year-wise 2001-02 391732, 2002-03 44860, 2003-04 20964 and 2004-05 16000 mandays were generated.
- Types of soil, moisture content, climatic conditions, local need of biomass and growth potential of plant species were the main considerations while selecting the species of plants for artificial regeneration.
- Selection of plant species was mostly fuel and small timber providing species rather than medicinal plant species. Most of the population of project area depends upon bio-mass fuel and local timber for house construction and agricultural implements.
- The level of awareness among the local community was quite satisfactory. This may be attributed first to high pitch of awareness generation campaign and secondly due to implementation of entry point activities in the villages.
- Several meetings between forest officials and villagers were arranged to generate awareness. Forest officials and villagers were keen in activities of the project and they were with full of true spirit.

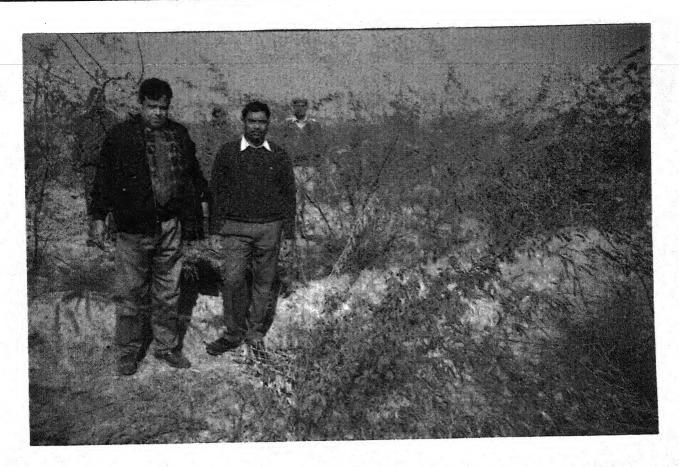
- Involvement of village communities was extremely satisfactory in project planning, implementation, usufructs sharing and other mechanisms of the projects.
- Temporary watchmen were appointed for protection and maintenance of plantation and maintenance of afforested areas. However, monthly payment was very low and hence watchmen had low level of commitment towards their duty.

CONSTRAINTS AND LIMITATIONS:

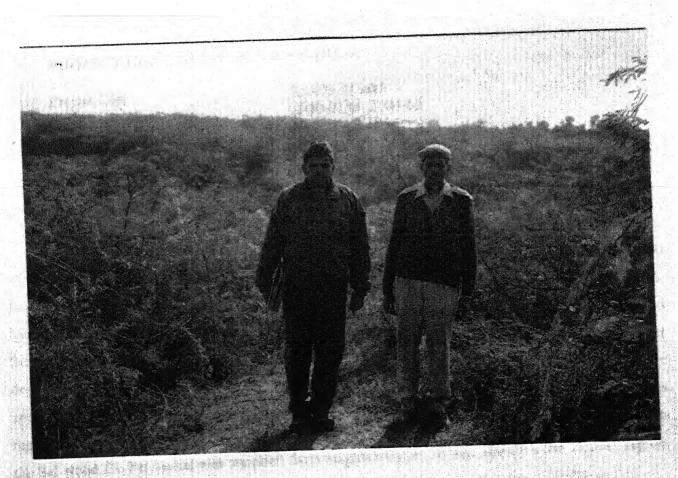
- All the demands of fuel, fodder and fiber are met from these forests. Villagers have exploited the forests and other land resources upto the extent that hardly any tree is left to make the environmental balance. Gully and ravine erosions are the result of heavy burden of humans and animals.
- Afforestation and maintenance of forest is the only alternative to rejuvenation the environment. Uncontrolled grazing and cutting the immature plants from roots is a serious threat to regenerated forests.

SUGGESTIONS AND RECOMMENDATIONS:

- It is felt that this project of afforestation is extremely useful for balanced environment as well as for villagers living around, it should continue in other parts also and it should be protected at least for ten years till the trees become mature. Afforestation and long term protection should be a continuous strategy, for which each plant period must be allocate with funds.
- Even after afforestation DPA and maintenance must continue in order to maintain the interest of villagers.
- The awareness campaign and capacity building programme among community people of JFMC villages should continue and further it should be enhanced.
- It would be wise if we involve religious institutions in plantation, management and protection of forests for continued involvement of communities. Religion is a power for common people, it should be directed towards positive activities, then there would be competition among communities to make their forests healthy. Temples, Dharamshalas, Pathshalas, Muths, Gurudwara, Mosques, Durgah Khanqah (Muth), Madrasa, Chruch etc. are the established respected and trusted traditional NGOs with which every Indian is linked, they should be entrusted the plantation and maintenance of their neighbouring forest lands. Surely there would be tremendous growth of forest with little money and manpower, as every thing of forest would be taken by the communities religiously.



Creation of Checkdam and afforestation in Anandipur Karkoli Village



A scene of afforestation in Basai Mohammadpur Village

CHAPTER I

PROJECT PROFILE AND PROPOSED ACTIVITIES

PROJECT TITLE: A.1.

National Afforestation Programme (NAP): A Participatory Approach of Sustainable Development of Forest through Forest Development Agency (FDA), Firozabad in Uttar Pradesh.

PROJECT IMPLEMENTING AGENCY: 2.

Firozabad **FDA** Firozabad District Firozabad Forest Division

Agra Forest Circle

Uttar Pradesh State

PROJECT LOCATION: 3.

Y-15 Firozabad

Sub watersheds Tundla, Firozabad, Shikohabad, Eka Development Blocks -

Tandla, Firozabad, Shikohabad, Sirsaganj. Jasarana

Forest Ranges 80 Villages are involved, see table Villages Associate

PROJECT COST, DURATION AND AREA: 4.

Rs.403.31 lakh

Project Cost 2000-01 to 2004-05 Project Duration

2000 Hectare Project Area

PROJECT PROPOSAL: A.2.

INTRODUCTION: 1.

Firozabad district (or forest division) is a newly formed district in western Uttar Pradesh, which is in triangular shape, from East to West, it is about 60 km and north to south also it is about 60 km. It is surrounded by districts Etah in the north-west, Mainpuri in the east and Agra in the south. Major river is Yamuna which forms its western boundary. Other rivers are Rind, Aaba, Sengar and Sirsa, but they are minor. Firozabad forests are mixed forests, which are having impact of Thar desert. Starting from ancient period, as the human encroachment increased and natural forests were consumed as a result the entire eco-system of the region was collapsed. There are evidences that this region was with full of Sal forests till the Taj Mahal of the neighbouring district Agra was built, as the Sal wood for Taj Mahal was supplied from neighbourhood. It was already a low rainfall region, which was further dried due to absence of forests and hot winds of Thar desert over powered. In such a harsh climate vegetation growth is too slow. Catchment areas of river Yamuna are converted into ravines (Beehar), Which are some times 50 to 100 feet deep gorges. The calcareous soil of the region has further aggravated the erosion process, as when it receives even a little rain water it becomes too loose, during summer season it becomes too hard and cracks into dust. Heavy concentration of population and large number of domestic animals are already beyond the carrying capacity of this division. Further Neelgai (blue bull) are multiplied which grazes the smallest saplings from its lower jaw till the roots come out from the soil. The total geographical area of the division is 2361 sq.km. and about 3.65 per cent of its area is under forest land and 75.08 per cent area is under cultivation. According to forest policy, there should be 33.3 per cent area under effective forest cover, for which Government and people have to jointly work. It would be wise to convert our entire waste lands into forest cover for overall sustainable farming rather than converting wastelands into agricultural land and in the process degrading our entire farm lands due to absence of forests.

2. PROJECT AREAS AND LOCATIONS:

The topography of Firozabad district is generally undulating and along river Yamuna ravines are the major features with disected landscape. Average altitude of the division is about 150 meters from the mean sea level. The drainage is from north-west to south-east parallel to river Yamuna. the project area is located in district Firozabad in Uttar Pradesh and spread over five forest ranges of the social forestry division. These forest ranges are Firozabad, Shikohabad, Tundla, Sirsaganj and Jasrana. The district of Firozabad is situated in the ancient region of "Brij-Bhoomi." Firozabad city is an industrial township famous for glass work and bangle, which is situated on the eastern bank of river Yamuna and lies about 200 kms south-east of Delhi. Two National Highways pass through the district one is NH-2 (Delhi-Calcutta) and another comes from Mainpuri which meets at Shikohabad.

(a) GEOLOGY AND SOIL: The project area is completely ravenous and the soil is generally deep. Soils are loamy to clay loam and neutral to mildly alkaline. The peripheral lands are free from carbonates and Ph. ranges from 7.5 to 8.0 and are immature with no significant profile development. The soils are moderately well drained and kankar is observed throughout the profile depth. In some pervious areas, dath clay textured soils are also found. The present material is basalt rocks which are broken into small fragments on exposure to rain. Hard pans are also found in some areas. The ravine beds generally contain well-drained sandy loam soils which are comparably moist.

(b) CLIMATE: The climate is characterized by cold weather from November to February, long hot summer from March to June and the monsoon season from July to September. Most of the rains are received during three months beginning from last week of June to the end of September. The rest of the year is dry except for occasional light showers during winter season. December and January are the coldest months which are some times quite severe that the temperature goes down to zero degree centigrade with occasional frost. Summer months are extremely hot, combined with 'Loo' (extremely hot dry winds) and occasional dust storms. Temperature goes very high, may be more than 48°C.

3. ANY PREVIOUS PROJECT :

As per records no project was launched previously.

4. ON-GOING PROJECT:

Socio-economic profiles of the villages covered, land holding and distribution of land use pattern, watershed features, forest cover, degree of pressure on forest resources, etc.

In the project area majority of the population rely on locally available forest source for meeting their basic energy needs. Depending upon local availability and accessibility, the priority goes for fuel wood rather than any inferior bio-mass fuel. Limited infrastructure, poverty, remoteness and backwardness of these areas along with illiteracy partly restrict to replace traditional fuel. This general situation is not expected to change rapidly within the foreseeable future. Thus the pressure on the forest for fuel woods is causing depletion of vegetative cover. The estimated annual requirement of fuel wood is as mentioned below:

Table 1.1: Estimated Requirement of Fuel wood

| Fuel wood requirement per head per month | Total population of project area | Pressure on the forest for fuel wood annually in tons |
|--|----------------------------------|---|
| 50 kg. | 179689 | 8984 |

Source: Social Forestry Division, FDA, Firozabad.

The project villages are situated in and around forest area. The weaker sections normally obtain their fodder from forest area. The cattle graze the grasses and leave the palatable species. With the implementation of the afforestation programme on 2000 hectare, the availability of fodder has increased. If controlled and careful grazing of cattle is carried out it can give sustainable fodder supply. The animal fodder requirement for different domestic animal is as given below:

Table 1.2: Estimated Requirement of Fodder

| Sl. No. | Animal Type | No. of Animals | Fodder requirement per head per day in kg. | Total requirement per day in kg |
|------------|---------------|----------------|--|---------------------------------|
| 1. | Cows | 23350 | 15 | 350,250 |
| 2. | Buffaloes | 39272 | 25 | 981,800 |
| 3. | Sheep & Goats | 25866 | 10 | 258,660 |
| 4. | Camel | 2409 | 30 | 72,270 |
| 5. | Mare | 322 | 15 | 4830 |
| 6. | Total | | | 16,67,810 |

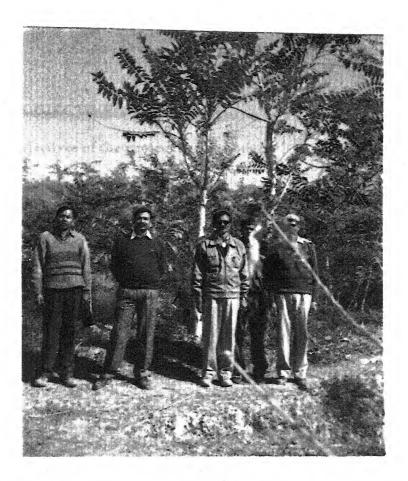
Thus annual requirement of fodder is 608750.65 tons.

The socio-economic profile of each villages with number of household, total population ,SC/OBC composition of the population, number and category of livestock, land holding and their distribution etc. is given below in table 1.3.

Table 1.3: Profile of JFMCs/Village

| SI. | Name of | | Tota | l Populat | ion | L | and in hecta | re | Cattle |
|-----|-----------|--------------------|-------|-----------|------|---------------|-----------------|----------------|------------|
| No. | Range | Name of Village | Total | sc | ОВС | Total Area | Land Holding | Forest Land | Population |
| 1. | Tundla | Dhirpurd | 8879 | 872 | 2000 | 1373.80 | 890.00 | 50.00 | 6900 |
| | | Ghurookua | 1618 | 181 | 1218 | 1090.01 | 735.00 | 40.00 | 2510 |
| | - | Alai | 2217 | 413 | 217 | 426.00 | 293.00 | 50.00 | 2030 |
| | | Kutubpur Saheb | 1819 | 200 | 1019 | 514.75 | 323.00 | 15.00 | 1925 |
| | | Bheekanpur Baghera | 1084 | 7 | 10 | 730.31 | 525.00 | 60.00 | 1420 |
| | | Niyamatpur | 1744 | 112 | 1244 | 892.77 | 628.00 | 30.00 | 2122 |
| | | Gwarai | 1843 | 235 | 1343 | 807.72 | 538.00 | 7.00 | 1315 |
| | | Nagla Singhee | 1927 | 270 | 827 | 890.00 | 485.00 | 50.00 | 1720 |
| | | Rasoolabad | 5040 | 89 | 1040 | 1290.0 | 987.00 | 10.00 | 2268 |
| | | Gadalpura | 1330 | 9 | 430 | 505.63 | 365.00 | 10.00 | 454 |
| 2 | Firozabad | Allahdadpur | 2467 | 183 | 1850 | 441.91 | 341.00 | 28.34 | 1090 |
| | | Jalalpur | 3937 | 568 | 2767 | 91.54 | 82.00 | 154.825 | 3125 |
| | | Kandarpur | 255 | 44 | 162 | 303.79 | 285.00 | 56.00 | 355 |
| | | Usmanpur | 1260 | 4 | 1186 | 576.00 | 487.00 | 79.378 | 1101 |
| | | Shankarpur | 1390 | 20 | 1284 | 1384.20 | 1150.00 | 364.372 | 1428 |
| | | Kuri Koopa | 5174 | 687 | 4145 | 881.00 | 775.00 | 159.909 | 2300 |
| | | Chandvar | 6730 | 116 | 6278 | 1728.87 | 1528.00 | 474.519 | 1865 |
| | | Sofipur | 1925 | 224 | 1565 | 292.00 | 275.00 | 6.227 | 410 |
| | | Vajidpur | 1117 | . 8 | 1039 | 221.00 | 202.00 | 30.232 | 1225 |
| | | Farol Nagria | 1158 | 80 | 928 | 727.99 | 682.00 | 206.166 | 1030 |
| | | Anandipur Karkoli | 2427 | 163 | 1916 | 891.84 | 865.00 | 364.90 | 1200 |
| | | Basai Muhammdpur | 3273 | 601 | 2118 | 925.35 | 887.00 | 224.997 | 1350 |
| | - | Madua | 492 | 6 | 462 | 509.71 | 488.00 | 234.959 | 1453 |
| - | | Sikahara Hardaspur | 2180 | 98 | 1650 | 437.64 | 395.00 | 233.494 | 840 |
| | | Prempur Anandipur | 521 | 57 | 8 | 208.83 | 202.00 | 36.666 | 925 |
| | | Aladipura | 980 | 0 | ·962 | 1384.20 | 1150.00 | 364.372 | 1090 |
| | | Datauzi | 1454 | 65 | 1262 | 612.78 | 588.00 | 89.883 | 1260 |
| | | Gudau | 6341 | 1395 | 4088 | 911.00 | 872.00 | 89.117 | 1730 |

| 3 | Shikohabad | Mubarakpur | 965 | 54 | 911 | 351.90 | 287.90 | 71.200 | 447 |
|---------------|--|-----------------------|--------|-------|--------|----------|----------|----------|-------|
| | | Samuha | 336 | | | | | | 447 |
| | | Hariya | 4992 | | | | | | 705 |
| | | Abbaspur | 2045 | | | | | 30.00 | 629 |
| | | Kalyanpur Bhartar | 695 | | | 448.16 | | 19.060 | 594 |
| 1 | | Hevatpura | 1255 | | 1040 | 451.20 | 451.20 | 35.00 | 554 |
| | | Rapari | 1062 | 51 | 1005 | 642.73 | 305.93 | 336.800 | 1050 |
| | | Asravali | 269 | 3 | 266 | 159.04 | 115.39 | 47.290 | 326 |
| | | Tatarpur | 1466 | 99 | 1361 | 415.37 | 252.10 | 159.700 | 672 |
| | | Attapur | 1676 | 136 | 1493 | 470.64 | 213.44 | 176.700 | 1094 |
| | | Shahzadpur Didoli | 375 | 13 | 362 | 512.60 | 344.00 | 168.600 | 275 |
| | | Shekhupur Garhi | 357 | 0 | 357 | 284.07 | 118.90 | 92.40 | 246 |
| 4 | Sirsaganj | Madava | 1221 | 0 | 1200 | 472.00 | 438.00 | 25.00 | 603 |
| | 3 3 | Uravar | 12422 | 175 | 11825 | 1425.00 | 1365.00 | 60.00 | 1760 |
| | | Badoura | 946 | 0 | 946 | 306.00 | 302.00 | 30.00 | 938 |
| | | Ruria Swaroopapur | 3107 | 230 | 200 | 589.00 | 536.00 | 20.00 | 948 |
| | | Ruchan Manikpur | 1857 | 90 | 967 | 424.00 | 402.00 | 10.00 | 680 |
| | | Mai Gadokhar | 2716 | 290 | 2000 | 376.00 | 361.00 | 10.00 | 1019 |
| | | Mo.Nadai | 1495 | 195 | 1300 | 285.00 | 254.00 | 40.00 | 1045 |
| | | Fatehpur Naseerpur | 1600 | 310 | 1200 | 364.00 | 298.00 | 30.00 | 1332 |
| | | Gadsan | 1567 | 320 | 500 | 235.00 | 228.00 | 25.00 | 1029 |
| | | Gudha | 2031 | 320 | 1611 | 417.00 | 334.00 | 30.00 | 745 |
| | | Pariharmaoo | 941 | 190 | 300 | 238.00 | 218.00 | 35.00 | 970 |
| | | Pariyar | 6751 | 390 | 4000 | 527.00 | 412.00 | 40.00 | 795 |
| | | Punichha | 2857 | 250 | 2500 | 458.00 | 389.00 | 50.00 | 1260 |
| 5 | Jasrana | Gadanpur | 5320 | 460 | 3260 | 1362.00 | 715.00 | 40.00 | 2600 |
| | | Rudrapur | 4265 | 230 | 2522 | 425.00 | 292.00 | 23.00 | 1450 |
| | | Katarai | 2400 | 215 | 1530 | 446.00 | 265.00 | 11.00 | 1140 |
| | | Nagla Gosha | 3000 | 335 | 1747 | 1760.00 | 26.00 | 100.00 | 1760 |
| | | Nagla Dhani | 1732 | 182 | 1268 | 835.00 | 369.00 | 31.00 | 510 |
| | - 2 | Thathi | 2265 | 290 | 1243 | 527.00 | 365.00 | 29.00 | 670 |
| | | Magnurpur Pavai | 1712 | 165 | 1103 | 998.00 | 417.00 | 21.00 | 810 |
| | | Eikhu | 765 | 80 | 385 | 617.00 | 256.00 | 9.00 | 250 |
| | | Darapur Milavali | 3316 | 345 | 1715 | 633.00 | 487.00 | 24.00 | 1550 |
| | | Udesher | 3185 | 310 | 1849 | 1295.00 | 752.00 | 50.00 | 1846 |
| | | Milavali Khadit | 2162 | 305 | 1242 | 991.00 | 545.00 | 37.00 | 1070 |
| | | Chidari Prithvi Singh | 816 | 90 | 458 | 712.00 | 508.00 | 24.00 | 405 |
| | | Nagla Jagannath | 772 | 42 | 369 | 694.00 | 290.00 | 18.00 | 232 |
| | | Suraya | 905 | 74 | 391 | 698.00 | 256.00 | 9.00 | 280 |
| | | Kushyari | 1672 | 7 | 781 | 1319.00 | 890.00 | 50.00 | 712 |
| | | Bhagner | 1470 | 150 | 898 | 1090.00 | 758.00 | 40.00 | 742 |
| | | Ninavali | 1670 | 170 | 885 | 1372.00 | 910.00 | 56.00 | 520 |
| | | Patti | 900 | 60 | 569 | 137.00 | 135.00 | 9.00 | 325 |
| | | Navan Gajadhar Singh | 1000 | 110 | 468 | 803.00 | 487.00 | 15.00 | -580 |
| | | Aapur | 2490 | 300 | 1460 | 477.00 | 247.00 | 20.00 | 1160 |
| | | Ginoli | 1435 | 170 | 726 | 1267.00 | 819.00 | 72.00 | 845 |
| | | Gopalpur | 3742 | 460 | 1980 | 504.00 | 365.00 | 20.00 | 1740 |
| | | Hatholi Jaisinghpur | 1342 | 240 | 659 | 711.00 | 471.00 | 30.00 | 610 |
| | | Padam | 2512 | 162 | 1868 | 499.00 | 241.00 | 9.00 | 1645 |
| | | Deva | 930 | 105 | 312 | 833.00 | 376.00 | 103.00 | 295 |
| | | Padhat | 1703 | 250 | 702 | 962.00 | 472.00 | 100.00 | 728 |
| - | | Farida Bahat | 620 | 85 | 243 | 1415.00 | 622.00 | 50.00 | 140 |
| $\overline{}$ | | TOTAL | 179687 | 16473 | 117147 | 56060.17 | 39302.17 | 6390.006 | 91219 |



Suitable specy (Arru) and plant protection is the key of success: A scene of Chandvar Village



Soil moisture has played a major role in growth of plants in Chandvar Village

5. PROJECT OBJECTIVES:

The main objectives of the project are as under:

- To stabilize 2000 hectare of ravine and Usar land of Firozabad district.
- Afforestation to meet the demand of fuel, fodder and small timber requirement of local people.
- To create community asset of the local people by improving moisture, water and soil of the area.
- To create employment generation through creation of productive assets.
- To form village level committee.

6. PROJECT COMPONENTS:

The important components have been mentioned below:

- Afforestation and protection of Artificial Regeneration
- > Soil and moisture conservation
- > Training
- Participatory Activity
- > Community asset creation
- > Technology extension
- > Entry point activities
- Monitoring and Evaluation etc.

7. SALIENT FEATURES INCLUDING PROPOSED STRATEGIES FOR TREATMENT:

Area selected for the project are Government lands belonging to forest department, which are severely degraded ravenous land. It is badly in need of management intervention activities like afforestation and soil conservation works. As near by villages are highly dependent on these forest areas for their fuel wood and fodder needs. These areas are very remotely located and least cared by the district administration. In this way the selection of the area was very much justified and the approach and method of afforestation by Forest Development Agency. Firozabad is highly beneficial to the local villages. The species selected for plantation under the management intervention are of immense local importance. By consulting with the local people and their needs and keeping in mind soil and climatic susceptibility, the plant species were selected. As ravenous areas are highly eroded and fertile soil cover has least moisture regime. The arid species like Acacia nilotica (Babool), Prosopis Juliflora, Remaj, Chhyonkar etc. are planted which are highly acceptable to the local population for their fuel wood needs. To meet the fodder needs of the local villagers Su-Babool, Allunthus (Arru) are planted. Dalbergia Sissoo (Shisham) is planted for the timber needs of the local people. Species like Dhak, Kanji, Casia, Shyamia are also planted to improve the environment.

8. CREATION OF JOINT FOREST MANAGEMENT COMMITTEE AND DEVELOPMENT FUNDS

After holding meetings with village panchayats 80 villages were selected, where Village Forest Committee (VFCs) were formed. After obtaining their consent a committee was formed with a chairman among the resident villagers and local forester as a Member Secretary. The following criterion was adopted in selecting 80 villages.

- Villagers with extreme unemployment and poverty who are in desperate need of some employment for their livelihood.
- A large proportion of SC and OBC population depending upon forest for their food, fodder and building material.
- Creation of community assets, which would be linking the villagers with overall ecodevelopment of the area in order to make them self-dependent.
- Villagers co-operate the afforestation activities and take interest in management and protection of forest.

9. IMPLEMENTING AGENCIES:

Composition and constitution of FDA and Field Implementing Units.

Conservator of Forest Brijbhumi Circle is the ex-office chairman of FDA, Divisional Forest Officer of the Forest Division is the ex-officio Secretary of the FDA. Firozabad district level officers of the important departments like Revenue, Police, Agriculture, Animal Husbandry, Medical Department etc. are the members of the FDA. There are 80 Joint Forest Management Committees which have been created to implement and maintain.

10. MICRO PLANNING AND JFM:

The micro plans for the project have been prepared by the range level micro planning teams. The whole district was divided into five sub segments namely: Tundla, Firozabad, Shikohabad, Sirsaganj and Jasrana. In each segment range the micro planning teams were headed by concerned Forest Range Officer with one Forester and one Forest Guard were engaged in micro-plan exercise using participatory rural appraisal process.

11. ENTRY POINT ACTIVITIES:

For involvement of villagers to make the afforestation scheme a success, besides plantation, organisation of health camps, installment of hand pumps distribution of smokeless chulhas, construction of earthen check-dams, ponds and bus stops, soil treatment, and other such community activities were undertaken as per the requirement of specific village. It created interest among

villagers to protect forest wealth from theft, lopping, harmful grazing and preventing from fire, which is a great challenge. Over grazing and lopping leads to soil erosion, depletion of vegetation and moisture. Entry Point Activity was welcomed by all the villagers and they expect to continue this programme in future also.

12. APPROVED PROGRAMME OF WORKS:

Overall 2000 hectare area have been created in the project during 2000-01 to 2001-02 under artificial regeneration. it is given below in table 1.4.

Table 1.4: Approved Programme of Work (2000-01 to 2004-05)

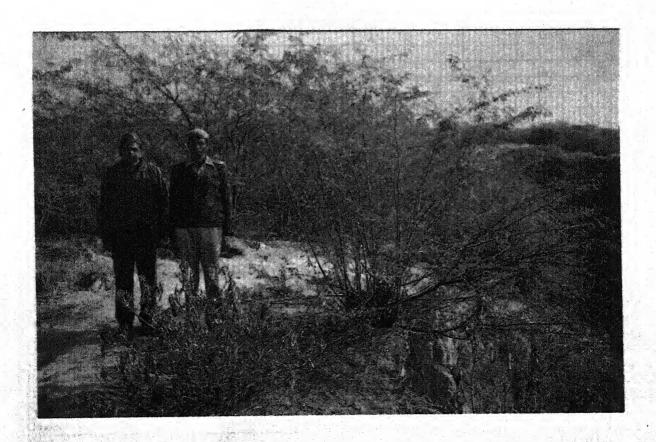
Approved wages rate Rs.58.00

Rs. in lakh and area in hectare

| Item of Work | Rate | 200 | 0-01 | 200 | 01-02 | 200 | 02-03 | 200 | 3-04 | 20 | 04-05 | | Total |
|---|----------------|------------|--------|------------|--------|------|--------|------------|----------|------|------------|------|--------|
| ILGIII OF VVOIK | Rs. | Phy | Fin | Phy | Fin | Phy | Fin | Phy | Fin | Ph | y Fin | Phy | Fin |
| 1. ANR | | | | | | | | | | | | 1 | |
| Admissible Rate | | - | | | | | | | | | 1 | | |
| a)advance | - | - | | - | - | - | - | - | - | - | - | - | - |
| b)creation | - | - | - | - | - | - | - | - | - | - | - | - | - |
| c)maintenance | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Sub total | - | - | - | - | - | T | - | - | - | - | T - | - | - |
| 2-AR | | | 1 | | | | | | | | | | |
| Admissible Rate | 13224 | - | - | - | - | - | - | - | T - | - | - | - | - |
| a)advance | 8784 | 1500 | 131.76 | 500 | 43.92 | - | - | - | - | | 1 - | 2000 | 175.68 |
| b)creation | 2700 | - | - | 2000 | 54.00 | - | - | - | - | - | - | 2000 | 54.00 |
| c)maintenance | 1740 | <u> -</u> | - | - | - | 2000 | 16.24 | 2000 | 9.28 | 2000 | 9.28 | 2000 | 34.80 |
| Sub Total | 13224 | 1500 | 131.76 | 2000 | 97.92 | 2000 | 16.24 | 2000 | 9.28 | 2000 | 9.28 | 2000 | 264.48 |
| 3.Pasture/SP Devt. | | | - | * | | , - | | | | | | | |
| Admissible Rate | | | | | | | | | | | | | |
| a)advance | 1 | - | - | - | - | - | - | - | - | | - | - | - |
| b)creation | - · | - // | | | | - | - | - | - | - " | - | - | - |
| c)maintenance | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Sub Total | - | - | ~ | - | - | - | - | 4 | - | - | - | - | - |
| Total of work | | 1500 | 131.76 | 2000 | 97.92 | 2000 | 16.24 | 2000 | 9.28 | 2000 | 9.28 | 2000 | 264.48 |
| 4.SMC(15% of plantation cost) | - | - | 29.67 | - | 10.00 | - | - | - | - | - | - | - | 39.67 |
| 5. Extension/ Awareness JFM/Training not less than 15% of plantation cost | , - | · <u>-</u> | 34.67 | _ | 5.00 | - | - - | <u>.</u> , | <u>-</u> | - | _ | | 39.67 |
| 6. Micro planing up 3% of plantation cost | | - , | 7.93 | · <u>-</u> | - | - | - | _ | | - | <u>-</u> | - | 7.93 |
| 7.Fancing up 5% of plantation cost | - | - | | • | 13.22 | - | - | - | _ | - | | - | 13.22 |
| 8.Monitoring & evaluation @2% | - | - | - | - | - | - | 3.29 | - | - | - | 2.00 | - | 5.29 |
| 9.Overhead (19% of plantation) | - | - | 13.17 | | 9.80 | - | 1.62 | - | 0.93 | - | 0.92 | - | 26.44 |
| 10.Improved Technology | - | | 6.61 | - | - | - | - | - | - * | - | - | | 6.61 |
| Total | | | 223.81 | = | 135.94 | | 21.15 | | 10.21 | - 7 | 12.20 | | 403.31 |



Afforestation and proper maintenance have effective impact against the soil erosion in Allahdadpur Village



Afforestation in Allahdadpur Village

CHAPTER II

QUANTITATIVE ANALYSIS AND FINDINGS

B.1 CLASSIFICATION OF AREA COVERED/TREATED:

Total target area covered under artificial regeneration of forest land was 2000 hectares. In first phase on 1500 hectare advance work was carried out in 2000-01 and in 2001-02 remaining 500 hectare land was brought under advance work and in the same year total 2000 hectare land was created. After that maintenance of 2000 hectares afforested land continued during 2002-03 to 2004-05. Phase-wise tables are given below.

Table 2.1: Classification of Area Coverage/Treated (2001-02 to 2004-05)

| Category | Added Natural Regeneration | Artificial Regenerati on | SP | Bamboo Plantation | Cane Plantation | Mix Plantation | MFP& Trees of Medical Value | Perennial Herbs | Total | % of Total Project Area |
|-----------------|----------------------------------|--|-----|----------------------|--------------------|---------------------------------------|--------------------------------------|--------------------|-------|----------------------------|
| | | | 200 | l-02 (Ad | vance W | ork) | | | | * |
| Forestry land | T - | 2000 | - | _ | - | - | - | - | 2000 | 100% |
| Community land | - | - | _ | - | - | - | - | - | - | - |
| Revenue land | _ | - | - | - | - | - | - | - | - | - |
| Govt. wasteland | - | - | - | - | - | - | - | - | | - |
| Private land | - | - | _ | - | - | | - | - | - | - |
| Others | - | - | - | - | - | - | _ | - | - | - |
| Total | _ | 2000 | - | - | - | - | (- | - | 2000 | 100% |
| | | 10.00 - 0.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - 10.00 - | | 2001-02 (| Creation) | · · · · · · · · · · · · · · · · · · · | ···· | <u> </u> | | |
| Forestry land | - | 1500 | | | - 1 | - | · - | - 1 | 1500 | 75% |
| Community land | - | × | - | - | - 1 | - | - | - | - | - |
| Revenue land | _ * | - | - " | - | - | - 1 | - | - | - | _ |
| Govt. wasteland | - 1 | - 1 | - | · - | - | - 1 | - 1 | - | - | _ |
| Private land | - | - | - | - 3 | "" | - | - | -, | - | - |
| Others | - | - | - | - | - | - | - | - | - | - |
| Total | - | 1500 | - | - | - | - 1 | - | - | 1500 | 75% |
| | | | | | 2002-03 (0 | Creation) | | | | - |
| Forestry land | _ | 500 | - 1 | - | - 1 | - 1 | - 1 | - 1 | 500 | 25% |
| Community land | - | - | - | - | - | | | - | - 1 | - |
| Revenue land | - | | _ | _ | | - | | - ! | | _ |
| Govt. wasteland | - | - | - | - | - 1 | - 1 | - | - | - 1 | _ |
| Private land | | | - | - | - 1 | - 1 | - 1 | _ | - 1 | _ |
| Others | - | - 1 | - | - | | - | - 1 | - | - 1 | |
| Total | | 500 | _ | | | - 1 | - 1 | - | 500 | 25% |
| | | | | 20 | 02-03 (Ma | intenance) | · | | | |
| Forestry land | _ ' | 1500 | - 1 | - 1 | | - 1 | - 1 | - 1 | 1500 | 75% |
| Community land | _ | - | - 1 | - | - | - | | - | - | |
| Revenue land | _ | - | - 1 | - | - 1 | - | - | | - 1 | _ |
| Govt. wasteland | _ | _ | | - | - 1 | - | | | | |
| Private land | | - | | | - | - | - 1 | | - 1 | |
| Others | * | | | - | - | | | | - | _ |
| Total | | 1500 | | | | | | * _ | 1500 | 75% |

Table 2.1 (contd...)

| | | | | 2 | 2003-04 (N | /aintenand | ce | | | | |
|-----------------|-----------------------|------|-----|---|------------|------------|----|---|------|------|--|
| Forestry land | - | 2000 | T - | - | - | Ι - | - | - | 2000 | 100% | |
| Community land | - | _ | - | - | - | - | - | _ | - | - | |
| Revenue land | - | - | - | - | - | _ | - | - | - | - | |
| Govt. wasteland | - | _ | - | - | - | - | - | - | - | - | |
| Private land | - | _ | - | - | - | - | - | - | - | - | |
| Others | - | _ | - | - | - | - | - | - | - | - | |
| Total | - | 2000 | - | - | - | - | - | - | 2000 | 100% | |
| | 2004-05 (Maintenance) | | | | | | | | | | |
| Forestry land | - | 2000 | - | - | T - | - | - | - | 2000 | 100% | |
| Community land | _ | _ | - | _ | - | - | - | - | - | - | |
| Revenue land | - | - | - | - | - | - | - | _ | - | - | |
| Govt. wasteland | - | - | - | - | - | - | - | - | - | - | |
| Private land | - | - | - | - | - | - | - | - | - | - | |
| Others | - | - | - | - | - | | - | - | - | - | |
| Total | - | 2000 | - | - | - | - | _ | - | 2000 | 100% | |

B.2 PHYSICAL AND FINANCIAL ACHIEVEMENTS:

According to table 2.2 during 2001-02 in advance work of artificial regeneration on 2000 hectare was fully achieved. Also the target of creation work on 1500 hectare was fully achieved. Over all financial achievement including the advance work and creation soil and moisture conservation, EPA, micro planning, fencing, improved technologies etc. was fully achieved.

During 2002-03 the creation of artificial regeneration on 500 hectare and maintenance of 1500 hectare was fully achieved. Over all financial achievement was cent per cent in all work like creation, maintenance, soil and moisture conservation, fencing, monitoring and evaluation etc.

During 2003-04 in maintenance both physical as well as financial targets were fully achieved and the same during 2004-05.

Under National afforestation programme (NAP) total target of 2000 hectare was fixed which was successfully achieved. There was financial proposal of Rs.407.27 lakh and the financial approval was of Rs.403.31 lakh i.e. 99.03 per cent.

In the first year 2000-01 Rs.223.81 lakh was spent, in 2001-02 Rs.135.94 lakh, 2002-03 Rs.21.15 lakh 2003-04 Rs.10.21 lakh and 2004-05 Rs.12.20 lakh were spent, thus the financial achievement was cent per cent (see Tables).

Table 2.2: Physical & Financial Achievements (2001-02)

| SI. | Item | Physical Area | a in hectare | Financia | l (Rs. in lakh) |
|-----|----------------------------|---------------------|----------------------|----------|----------------------|
| No | | Target for the area | Achieved in the year | Target | Achieved in the year |
| 1. | Natural Regeneration | | | | |
| | a) Advance work | - | - | _ | - |
| | b) creation | - | - , | - | - |
| | c) maintenance | - | - | - | - |
| | Sub Total | - | - | - | |
| 2. | Artificial Regeneration | | | | |
| | a) Advance work | 2000 | 2000 | 175.68 | 175.68 |
| | b) creation | 1500 | 1500 | 40.50 | 40.50 |
| | c) maintenance | - | - | - | - |
| | Sub Total | - | - | 216.18 | 216.18 |
| 3. | Pasture Development | | | | |
| | a) Advance work | _ | | - | - |
| | b) creation | _ | | - | |
| | c) maintenance | _ | - | _ | _ |
| | Sub Total | - | - | - | - |
| 4. | Soil & moisture conversion | - | - | 36.27 | 36.27 |
| 5. | EPA | - | - | 39.67 | 39.67 |
| 6. | Micro Planing | - | - | 7.93 | 7.93 |
| 7. | Fencing | - | | 12.10 | 12.10 |
| 8. | Monitoring & evaluation | • | <u> </u> | • . | - |
| 9. | Improved technologies | - | - | 6.61 | 6.61 |
| 10. | Overheads | | · - | 20.45 | 20.45 |
| | Total | - | - | 339.21 | 339.21 |

Table 2.3: Physical & Financial Achievements (2002-03)

| Sl. | Item | Physical Area | a in hectare | Financia | al (Rs. in lakh) |
|-----|----------------------------|---------------------|----------------------|----------|----------------------|
| No. | | Target for the area | Achieved in the year | Target | Achieved in the year |
| 1. | Natural Regeneration | | | | |
| | a) Advance work | - | - | _ | - |
| | b) creation | - | - | _ | _ |
| | c) maintenance | - | - 11 | _ | - |
| | Sub Total | - | - | _ | - |
| 2. | Artificial Regeneration | | | | |
| | a) Advance work | _ | - | - | - |
| | b) creation | 500 | 500 | 13.50 | 13.50 |
| | c) maintenance | 1500 | 1500 | 12.01 | 12.01 |
| | Sub Total | - | - | 25.51 | 25.51 |
| 3. | Pasture Development | | | | |
| | a) Advance work | _ | - | - | _ |
| | b) creation | _ | - | - | |
| | c) maintenance | _ | - | - | - |
| | Sub Total | - | - | - | _ |
| | Soil & moisture conversion | - | | 3.40 | 3.40 |
| 5. | EPA | _ | | *** | _ |
| 6. | Micro Planing | _ | - | | - |
| 7. | Fencing | _ | - | 1.12 | 1.12 |
| 8. | Monitoring & evaluation | <u>-</u> . | - | 3.29 | 3.29 |
| 9. | Improved technologies | - | - | - | |
| 10. | Overheads | - | _ | 4.41 | 4.41 |
| | Total | | | 37.46 | 37.46 |

Table 2.4: Physical & Financial Achievements (2003-04)

| Sl. | Item | Physical Area | a in hectare | Financia | al (Rs. in lakh) |
|-----|----------------------------|---------------------|----------------------|----------|----------------------|
| No. | · | Target for the area | Achieved in the year | Target | Achieved in the year |
| 1. | Natural Regeneration | | | | |
| | a) Advance work | - | - | - | - |
| | b) creation | | - | _ | - |
| | c) maintenance | | - | _ | _ |
| | Sub Total | _ | - | _ | - |
| 2. | Artificial Regeneration | | | | |
| | a) Advance work | - | - | _ | - |
| | b) creation | - | - | - | - |
| | c) maintenance | 2000 | 2000 | 13.51 | 13.51 |
| | Sub Total | 2000 | 2000 | 13.51 | 13.51 |
| 3. | Pasture Development | | | | |
| | a) Advance work | - | - | _ | - |
| | b) creation | _ | - | - | - |
| | c) maintenance | - | - | _ | - |
| | Sub Total | - | - | - | - |
| 4. | Soil & moisture conversion | - | - | _ | - |
| 5. | EPA | - | - | _ | _ |
| 6. | Micro Planing | - | - | _ | - |
| 7. | Fencing | - | - | _ | - |
| 8. | Monitoring & evaluation | _ | _ | • | - |
| 9. | Improved technologies | • | | _ | - |
| 10. | Overheads | - | - | 0.93 | 0.93 |
| | Total | - | - | 14.44 | 14.44 |

Table 2.5: Physical & Financial Achievements (2001-02)

| S1. | Item | Physical Area | in hectare | Financi | al (Rs. in lakh) |
|-----|----------------------------|---------------------|----------------------|---------|----------------------|
| No. | | Target for the area | Achieved in the year | Target | Achieved in the year |
| 1. | Natural Regeneration | | | | |
| | a) Advance work | · - | - | - | - |
| | b) creation | - | - | | - |
| 1 | c) maintenance | - | | _ | _ |
| | Sub Total | - | - | - | - |
| 2. | Artificial Regeneration | | | | |
| | a) Advance work | - | - | ••• | - |
| | b) creation | 2000 | 2000 | 9.28 | 9.28 |
| | c) maintenance | 2000 | 2000 | 9.28 | 9.28 |
| | Sub Total | - | _ | - | - |
| 3. | Pasture Development | | | | |
| | a) Advance work | | | _ | - |
| | b) creation | _ | - | | - |
| | c) maintenance | _ | | | - |
| | Sub Total | _ | - | | - |
| 4. | Soil & moisture conversion | _ | - | | - |
| 5. | EPA | | • | - | - |
| 6. | Micro Planing | | - | | - |
| 7. | Fencing | _ | - | _ | |
| 8. | Monitoring & evaluation | _ | | × - | |
| 9. | Improved technologies | | - , | | - |
| 10. | Overheads | | - | 0.92 | 0.92 |
| | Total | - | | 10.20 | 10.20 |

(i) Adequacy of the Planting Stock Raised or Available in Each Year:

Plantation work was carried out during 2000-01 to 2001-02 in which 2010 hectare area was covered in 80 VFCs and total 2,211,000 plants of different species were planted under artificial regeneration. Important species of plants were Prosopis, babool, Alenthis, Neem, Sheesham, Kanjee etc. and the average survival rate was estimated about more than 70.00 per cent. In Tundla range 225 hectare was afforested with 247,500 plants. Firozabad range 860 hectare with 748,000j plants. Shikohabad range 160 hectare with 176,000 plants, Sirsaganj range 400 hectare with 440,000 plants and in Jasrana range 445 hectare with 599,500 plants. See table 2.6.

Table 2.6: Inventory of Plant Species Used in the Project during 2001-02 (Artificial Regeneration)

| SL. NO. | Range | VFC/Site Name | Area | No. of | Survival | Species |
|------------|------------|--------------------|---------------|-----------------|-------------|--|
| | Tundla | Dhirpur | (ha) 20.00 | Plants 22000 | Rate 70% | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 2. | unuia | Ghurookuaa | 20.00 | 22000 | 10/6 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 3. | | Alai | 20.00 | 22000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 4. | | Kutubpur Saheb | 10.00 | 11000 | <u> </u> | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 5. | | Bheekanpur Baghers | 30.00 | 33000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 6. | | Niyamatput | 30.00 | 33000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 7. | | Gwarai | 50.00 | 55000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 8. | ·········· | Nagla Singhee | 30.00 | 33000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 9. | | Rasoolabad | 10.00 | 11000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 10 | | Gadalpura | 5.00 | 5500 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| | | Allahdadpur | 20.00 | 22000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 12. | | Jalalpur | 65.00 | 71500 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 13. | | Kandarpur | 20.00 | 22000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 14. | | Usmanpur | 20.00 | 22000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 15. | | Shankarpur | 70.00 | 77000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 16. | | Kuri Koopa | 20.00 | 22000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 17. | | Chandvar | 80.00 | 88000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 18. | | Sofipur | 5.00 | 5500 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 19. | | Vajidpur | 30.00 | 33000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 20. | | Farol Nagria | 50.00 | 55000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 21. | | Anandipur Karkoli | 60.00 | 66000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 22. | | Basai Muhammdpur | 50.00 | 55000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 23. | | Madua | 20.00 | 22000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 24. | | Sikahara Hardaspur | 35.00 | 38500 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 25. | | Prempur Anandipur | 30.00 | 33000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 26. | | Aladipura | 25.00 | 27500 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 27. | | Datauzi | 20.00 | 22000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 28. | | Gudau | 60.00 | 66000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 29. Shi | kohabad | Mubarakpur | 10.00 | 11000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 30. | | Samuha | 10.00 | 11000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 31. | | Hariya | 2.00 | 2200 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 32. | | Abbaspur | 10.00 | 11000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 33. | | Kalyanpur Bhartar | 25.00 | 27500 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 34. | | Hevatpura | 10.00 | 11000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 35. | | Rapari | 10.00 | 11000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 36. | | Asravali | 10.00 | 11000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 377 | | Tatarpur | 10.00 | 11000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 38. | - | Attapur | 20.00 | 22000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 39 | | Shahzadpur Didoli | 23.00 | 25300 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 40. | | Shekhupur Garhi | 20.00 | 22000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 41. Sirs | aganj | Madava | 5.00 | 5500 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 42. | | Uravar | 45.00 | 49500 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 43. | | Badoura | 30.00 | 33000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 44. | | Ruria Swaroopapur | 65.00 | 71500 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 45. | | Ruchan Manikpur | 30.00 | 33000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 46. | | Mai Gadokhar | 30.00 | 33000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 47. | | Mo. Nadai | 50.00 | 55000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 48. | | Fatehpur Naseerpur | 50.00 | 55000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 49. | | Gadsan | 5.00 | 5500 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 50. | | Gudha | 5.00 | 5500 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 51. | | Pariharmaoo | 5.00 | 5500 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 52. | | Pariyar | 40.00 | 44000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 53. | | Punichha | 40.00 | 44000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 54. Jas | srana | Gadanpur | 40.00 | 44000 | | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |

| 55. | Rudrapur | 23.00 | 25300 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
|-----|-----------------------|---------|---------|--|
| 56. | Katarai | 11.00 | 11000 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 57. | Nagla Gosha | 50.00 | 55000 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 58. | Nagla Dhani | 31.00 | 34100 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 59. | Thathi | 29.00 | 31900 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 60. | Magnurpur Pavai | 21.00 | 23100 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 61. | Eikhu | 9.00 | 9900 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 62. | Darapur Milavali | 24.00 | 26400 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 63. | Udesher | 50.00 | 55000 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 64. | Milavali Khadit | 20.00 | 22000 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 65. | Chidari Prithvi Singh | 24.00 | 26400 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 66. | Nagla Jagannath | 18.00 | 19800 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 67. | Suraya | 9.00 | 9900 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 68. | Kushyari | 50.00 | 55000 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 69 | Bhagner | 24.00 | 26400 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 70. | Ninavali | 5.00 | 5500 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 71. | Patti | 5.00 | 5500 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 72. | Navan Gajadhar Singh | 5.00 | 5500 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 73. | Aapur | 5.00 | 5500 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 74. | Ginoli | 5.00 | 5500 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 75. | Gopalpur | 5.00 | 5500 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 76. | Hatholi Jay Singhpur | 17.00 | 18700 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 77. | Padam | 5.00 | 5500 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 78. | Deva | 50.00 | 55000 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 79. | Padhat | 5.00 | 5500 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| 80. | Farida Bahat | 5.00 | 5500 | Prosopis, Babool, Alenthis, Neem, Sheesham, Kanjee etc |
| | TOTAL | 2010.00 | 2211000 | |

(ii) An Overview of Sample JFMC:

Randomly 8 JFMCs samples were chosen in different sites, namely Chandwar, Basai, Mohammadpur, Anandipur Karkoli, Allah Dadpur, Dhirpura, Gurkuan, Niyamatpur and Rasoolabad, which were physically verified to evaluate the survival rate and growth of species. Details of sample JFMCs are given in the following table:

Table 2.7: Inventory of Sample JFMCs

| SL. NO. | Scheme | VFC site Name | Area in Hectare | No. of plants | Survival Rates (%) | Species | Plantation Year |
|------------|--------|--------------------|--------------------|---------------|-----------------------|--|-----------------------|
| 1. | AR | Chandvar | 80 | 88,000 | 75 | Prosopolis, Babool, Alenthis, Neem, Sheesham, Kanjee etc. | 2000-01 to 2001-02 |
| 2. | AR | Basai Mohammadpur | 50 | 55,000 | 75 | Prosopolis, Babool, Alenthis, Neem, Sheesham, Kanjee etc | |
| 3. | AR | Anandikpur Karkoli | 60 | 66,000 | 65 | Prosopolis, Babool, Alenthis, Neem, Sheesham, Kanjee etc | * . |
| 4. | AR | Allahdadpur | 20 | 22,000 | 70 | Prosopolis, Babool, Alenthis, Neem, Sheesham, Kanjee etc | |
| 5. | AR | Dhirpura | 20 | 22,000 | 75 | Prosopolis,Babool,Alenthis, Neem,Sheesham, Kanjee etc | |
| 6. | AR | Gurkuan | 20 | 22,000 | 75 | Prosopolis,Babool,Alenthis, Neem,Sheesham, Kanjee etc | |
| 7. | AR | Niyamatpur | 30 | 33,000 | 65 | Prosopolis, Babool, Alenthis, Neem, Sheesham, Kanjee etc | |
| 8. | AR | Rasoolabad | 10 | 11,000 | 80 | Prosopolis, Babool, Alenthis, Neem, Sheesham, Kanjee etc | |
| | - | Total | 290 | 319000 | 73 | | |

Source: Based on field observation and FDA records

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1. VFC Chandvar:

In location of VFC Chandvar is inside the ravines of river Yamuna in the south of Firozabad city (range headquarter) at a distance of about 25 km. The entire area of plantation of this VFC falls in reserve forest category. The topography of this area is highly ravinous with calcareous soil. There is total 474.519 hectare of forest land in this village. Total 88,000 plants of different species were planted on 80 hectare during 2000-01 to 2001-02, were Alanthis, Juliflora, Babool, Prosopolis etc. Average survival rate of plants was estimated after physical verification, it was found about 75.00 per cent which was quite encouraging, when there was a drought condition. After discussion with the villagers one can understand that their joint efforts and desire alongwith positive approach of FDA was the main cause of extreme success.

Right type of drought resistant species were planted which created moisture to enable further plantation successfully. For retaining the rain water, check dam methods was quite successful and the moisture in the trenches resulted the fast growth of plants as compared to plants grown on bunds. However, miscreants occasionally cut the plants which needs to be guarded. The height of plants were Alenthus 15¹, Juliflora 11¹ Babool 4.5¹ Prosopolis 4¹. In EPA here a Bus stop shelter, hand pump and Pond are provided for which villagers are grateful to FDA.

2. VFC Basai Mohammadpur:

VFC Basai Mohammadpur is about 30 km in the south of Firozabad city/range headquarter which is located in ravines along river Yamuna. There is total 224.997 hectare forest land in this village. Total 55,000 plants of different species were planted on 50 hectare of land during 2000-01 to 2001-02 were Juliflora, Cheukar, Babool, Neem etc. After physical survey in the field average survival rate of plants was about 75.00 per cent which is not bad in the most dry and infertile soil. Though grazing of animal is done with utmost care, but occasionally steeling the plants and grazing of neel-gai is beyond control. Small and big check-dam strategy is quite successful in retaining the moisture besides other control measures. In EPA villagers are provided with a bus-stop shelter.

3. VFC Anandipur Karkoli:

VFC Anandipur karkoli in southern side of Firozabad city/range head quarter at a distance of about 35 km. The total forest land in 364.90 hectare in which the entire afforested 960 hectare area falls in ravines. Villagers are quite poor who depend on meager agricultural yield and labour work is the alternative source of income. About 60 hectare of forest land was afforested where 66,000 plants

of various species like Juliflora, Desi Babool, Alenthis etc. were grown. Since the entire area falls on upper reaches of ravines, the soil is quite dry, thus the growth of plants is stunted and the survival rate of plants was estimated about 65.00 per cent. The height of Juliflora was 9¹, Babool 6¹ and Alenthis 8¹. Here no EPA work was done.

4. VFC Allah Dadpur:

VFC Allah Dadpur is located in the south-east of Firozabad city/range headquarter at a distance of about 38 km. The total forest land is 28.34 hectare and afforested land is about 20 hectare which is located amids ravines. Total 22,000 plants were grown of different species. Juliflora is a dominant plant followed by Arru, Desi Babool etc. The survival rate of plants is about 70.00 per cent. Plants have attained quite good heights like Juliflroa about 12!, Arru 15! and Desi Babool of 6!. One hand pump has been installed under EPA in this VFC for which villagers were quite happy.

5. VFC Dhirpura:

VFC Dhirpura is about 20 km from Firozabad city and at the same distance also from Tundla range headquarter. It is located near the meandering river Yamuna. The entire area is falling under ravines. People are poor due to meager yield from soil and unirrigated small land holdings. Animal husbandry and labour work is the alternative source of earning. Out of 50 hectare of total forest land, about 20 hectares have been brought under afforestation in which Jauliflora, Ranikata, Babool, Ber, Sheesham, Arru, Neem etc. species were planted. The estimated plantation was 22,000 and about 75.00 per cent survival rate was assessed. The height of plants like Juliflora 12!-15!, Babool 8!-10!, Ber 10!, Sheesham 10!, Neem and Arru 8!-10!. One bus stop was constructed and a handpump was installed for the villagers under EPA.

6. VFC Gurkuan:

This VFC is about 25 km. from Firozabad city and at 20 km distance from Tundla range headquarter. It is located in river Yamuna ravines. Most of the conditions are matching with the above VFC. There is total 40 hectare of forest land under forest department, out of which 20 hectare of land is brought under afforestation. The variety of plants are grown here are Juliflora, Arru, Neem, Papdi, Sheesham, Babool etc., and the height of plants is as mentioned above. The total plants of different species are planted here are 22,000 and the estimated survival rate of plants is 75.00 per cent.

Under EPA a pond has been constructed and a handpump has been installed. Both pond and handpump have made the lives of villagers quite easy.

7. VFC Niyamatpur:

VFC Niyamatpur is at a distance of about 28 km from Firozabad and about 25 km from Tundla range headquarter. The entire area is affected by ravines only small patches are left for agriculture. The entire 30 hectare forest land belonging to forest department has been brought under the afforestation scheme. Overall 33,000 plant of different species like Juliflora, Arru, Neem, Papdi, Sheesham, Babool etc. are planted. The survival rate has been estimated to be 69.00 per cent. Here land is too dry which has caused the stunted growth of plants. According to the needs of villagers, here a pond has been constructed and a handpump has been installed under EPA, which is quite useful.

8. VFC Rasoolabad:

VFC Rasoolabad is at a distance of about 35 km from Firozabad and about 30 km from Tundla range headquarter. The entire forest land of 10 hectare belongs to forest department had been undertaken for afforestation is located in ravines of river Yamuna. About 11,000 plants of different species like Juliflora, Arru, Babool etc. were grown. Though the land is dry due to which plant growth is slow upto 7! high but their survival rate is above 80.00 per cent. In this VFC, no EPA work could be done.

B.3 PEOPLE'S PARTICIPATION:

B.3.1 Participatory Rural Appraisal/Micro Planning:

Prior to the implementation of afforestation project the micro-plans of 80 VFCs were completed, which were available with the Forest Department. These micro-plans were prepared through the process of PRA as required. A lump sum amount of Rs.7.93 lakh was spent in preparation of micro-plans of 80 VFC, which is about 2.00 per cent of the total project cost and 3.00 per cent cost of the work component as per NAEB guidelines.

B.3.2 Entry Point Activities:

Among 80 VFC villages the EPA work was carried out in variety of ways. As 41 health camps were organised, 10 hand pumps were installed, 05 ponds and 08 Bus stands were constructed, 660 Smokeless Chulhas were distributed, 93500 cu. mt. soil work was done to create earthen check dams to restrict the ravines and recharge the ground water and soil treatment was done on 545 hectare of land. After discussions with villagers it appeared that EPA has made the lives of villagers relatively easy and bounded them to make the afforestation scheme successful for future prosperity. However many more villagers were required to be installed with hand pump, as it is a durable asset and ground water is too deep and costly which is not affordable by the villagers, See tables 2.8, 2.9 and 2.10.

Table 2.8: Entry Point Activities

| Sl.No. | Activity | Quantity |
|--------|--------------------|--------------|
| 1. | Health Camps | 41 |
| 2. | Hand Pumps | 10 |
| 3. | Ponds | 05 |
| 4. | Smokeless Chulhas | 660 |
| 5. | Bus Stands | 08 |
| 6. | Earthen Check Dams | 93,500 Cumt. |
| 7. | Soil Treatment | 545 Hect. |

Source: Social Forestry Division, FDA, Firozabad.

Table 2.9: Expenditure on EPA Work

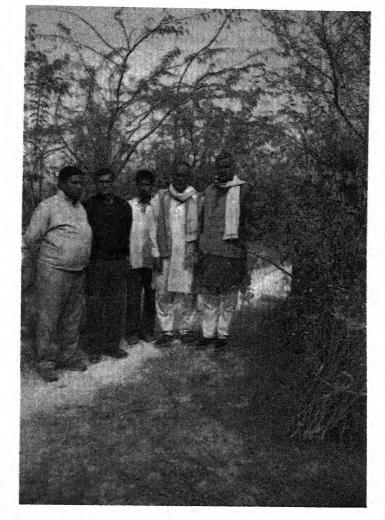
| Sl.No. Year of Expenditure | | Expenditure (Rs.lakh) |
|----------------------------|---------|-----------------------|
| 1. | 2000-01 | - |
| 2. | 2001-02 | 39.67 |
| 3. | 2002-03 | - |
| 4. | 2003-04 | - |
| 5. | 2004-05 | - |
| 6. | 2005-06 | - |
| 7. | 2006-07 | - * |
| - ' | Total | 39.67 |

Table 2.10: EPA Work and Expenditure in Each Village

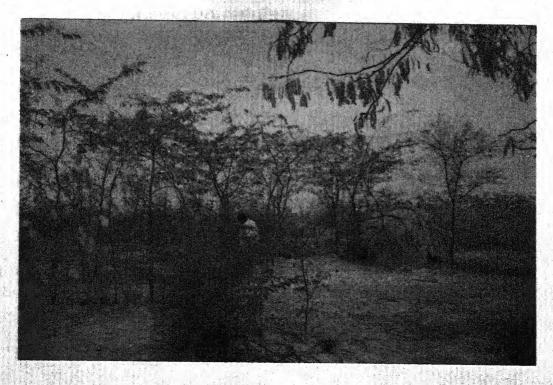
| SI. No. | Name of Village | Assets created under EPA | No. of Assets | Expenditure incurred (Rs.) | Peoples' Contribution Towards Expenditure |
|------------|--------------------|---------------------------------------|------------------|----------------------------|--|
| 1. | Dhirpura | Plantation, Bus Stop, Handpump | 3 | 550668 | People Coordinated |
| 2. | Ghurookua | Plantation, Pond, Handpump | 2 | 610628 | |
| 3. | Alai | Plantation | 1 | 497628 | _ |
| 4. | Kutubpur Saheb | Plantation | 1 | 190520 | |
| 5. | Bheekanpur Baghers | Plantation, Handpump | 2 | 551192 | |
| 6. | Niyamatput | Plantation, Pond, Handpump | 3 | 712192 | |
| 7. | Gwarai | Plantation, Bus Stop, Handpump | 3 | 876320 | _ |
| 8. | Nagla Singhee | Plantation, Pond | 2 | 677192 | _ |
| 9. | Rasoolabad | Plantation | 1 | 190520 | |
| 10. | Gadalpura | Plantation | 1 | 114510 | |
| 11. | Allahdadpur | Plantation, Handpump | 2 | 370828 | |
| 12. | Jalalpur | Plantation, Pond | 2 | 1071542 | |
| 13. | Kandarpur | Plantation | 1 | 354628 | |
| 14. | Usmanpur | Plantation | 1 | 354628 | |
| 15. | Shankarpur | Plantation | 1 | 1111712 | |
| 16. | Kuri Koopa | Plantation | 1 | 426628 | |
| 17. | Chandvar | Plantation, Bus Stop, Hand Pump, Pond | 4 | 1351476 | |
| 18. | Sofipur | Plantation | 1 | 113510 | |
| 19. | Vajidpur | Plantation | 1 | 502008 | |
| 20. | Farol Nagria | Plantation, Hand Pump | 2 | 884968 | |
| 21. | Anandipur Karkoli | Plantation | 1 | 1016148 | |
| 22. | Basai Muhammdpur | Plantation, Bus Stop | 2 | 889968 | |
| 23. | Madua | Plantation | 1 | 370828 | |
| 24. | Sikahara Hardaspur | Plantation | 1 | 598203 | |
| 25. | Prempur Anandipur | Plantation | 1 | 502008 | _ |
| 26. | Aladipura | Plantation | 1 | 430638 | |
| 27. | Datauzi | Plantation | 1 | 426628 | |
| 28. | Gudau | Plantation, Hand Pump | 2 | 1000716 | |
| 29. | Mubarakpur | Plantation | 1 | 256745 | |
| 30. | Samuha | Plantation | 1 | 256745 | |
| 31. | Hariya | Plantation, Bus Stop | 2 | 81404 | |
| 32. | Abbaspur | Plantation | 1 | 183020 | |
| 33. | Kalyanpur Bhartar | Plantation | 1 | 496095 | |
| 34. | Hevatpura | Plantation | 1 | 183020 | _ |
| 35. | Rapari | Plantation, Bus Stop | 2 | 276745 | |
| 36. | Asravali | Plantation | 1 | 183020 | |
| 37. | Tatarpur | Plantation | 1 | 183020 | |
| 38. | Attapur | Plantation | 1 | 146360 | |
| 39. | Shahzadpur Didoli | Plantation | 1 | 429691 | |
| 40. | Shekhupur Garhi | Plantation | 1 | 384085 | |
| 41. | Madava | Plantation | 1 | 105510 | |
| 42. | Uravar | Plantation | 1 | 801367 | - |
| 43. | Badoura | Plantation | 1 | 531497 | |
| 40. | | i iantativii | | 001707 | |

Table 2.10 (contd...)

| 44. 45. 46. 47. 48. 49. | Ruchan Manikpur Mai Gadokhar Mo. Nadai Fatehpur Naseerpur | Plantation, Bus Stop Plantation Plantation | 1 1 | 1094297 328900 | |
|--|--|--|-----|-------------------|---------|
| 47. 48. 49. | Mo. Nadai Fatehpur Naseerpur | Plantation | + 1 | | 1 |
| 48. 49. | Fatehpur Naseerpur | | | 476280 | |
| 49. | | Plantation | 1 1 | 854737 | |
| | | Plantation | 1 | 827737 | |
| <u> </u> | Gadsan | Plantation | 1 | 105510 | |
| 50. | Gudha | Plantation | 11 | 105510 | |
| 51. | Pariharmaoo | Plantation | 1 | 105510 | |
| 52. | Pariyar | Plantation | 1 | 696857 | _ |
| 53. | Punichha | Plantation, Bus Stop | 2 | 727357 | _ |
| 54. | Gadanpur | Plantation | 1 | 664560 | |
| 55. | Rudrapur | Plantation | 1 | 390466 | |
| 56. | Katarai | Plantation | 1 | 196722 | |
| 57. | Nagla Gosha | Plantation | 1 | 716580 | u-1100m |
| 58. | Nagla Dhani | Plantation | 1 | 512082 | |
| 59. | Thathi | Plantation | 1 | 481678 | |
| 60. | Magnurpur Pavai | Plantation | 1 | 348742 | |
| 61. | Eikhu | Plantation | 1 | 166318 | · |
| 62. | Darapur Milavali | Plantation | 1 | 405668 | |
| 63. | Udesher | Plantation | 1 | 816580 | |
| 64. | Milavali Khadit | Plantation | 1 | 333540 | - |
| 65. | Chidari Prithvi Singh | Plantation | 1 | 405668 | |
| 36. | Nagla Jagannath | Plantation | 1 | 303136 | |
| 37. | Suraya | Plantation | 1 | 166318 | |
| 68. | Kushyari | Plantation | 1 | 816580 | |
| 39. | Bhagner | Plantation | 1 | 405668 | |
| 70. | Ninavali | Plantation | 1 | 816580 | |
| 71. | Patti | Plantation | 1 | 287934 | |
| 72. | Navan Gajadhar Singh | Plantation | 1 | 83190 | |
| 73. | Aapur | Plantation | 1 | 83190 | |
| 74. | Ginoli | Plantation . | 1 | 83190 | |
| 75. | Gopalpur | Plantation | 1 | 83190 | |
| 76. | Hatholi Jay Singhpur | Plantation | 1 | 83190 | |
| 77. | Padam | Plantation | 1 | 83190 | - |
| ' 8. | Deva | Plantation | 1 | 83190 | - |
| • | Padhat | Plantation | 1 | 83190 | |
| 10. | Farida Bahat | Plantation | 1 | 83190 | - |
| | TOTAL | D' ' ' DD A D' | | 35852943 | |



Villagers illegally cut the plants in Dheerpura Village



Landless poor collect biomass from forest for their livelihood in Dheerpur Village

B.3.3: Joint Forest Management:

The following JFMC approach was adopted in the project:

| _(a) | Number of Villages where formation initiated in division | 80 | |
|------|--|---------|------|
| (b) | Number of villagers where formal committee established in division | 80 | |
| (c) | Total number of committees established so far in this project area | 80 | |
| (d) | Total membership in terms of households/families | 2398 | 2. |
| (e) | Percentage of women, SCs, STs, in the JFNC committees: Women | SCs | STs |
| ` ' | | 25 000% | Niil |

Table 2.11: Social Composition of Beneficiaries

| Social Category | Male | Female | Total | Percentage |
|-----------------|--------|--------|--------|------------|
| Scheduled Caste | 9887 | 6586 | 16473 | 9.17 |
| Scheduled Tribe | - | - | - | - |
| Others | 97929 | 65285 | 163214 | 90.83 |
| Total | 107816 | 71871 | 179687 | 100.00 |

Source: Social Forestry Division, FDA, Firozabad.

(f) Establishment of village development fund

No

(g) JFMC/FDA Meetings

Table 2.12: Meeting held during 2000-01 to 2006-07

| GBMs and EBMs held | JFMC Meetings | FDA Meetings |
|--|---------------|--------------|
| Number of General Body Meetings held | 240 | 02 |
| Number of Executive Body Meetings held | 400 | 02 |

Source: Social Forestry Division, FDA, Firozabad.

(h) Micro Planning

Prepared/discussed/ratified by VFC/under implementation, Micro Plants were prepared for all the 80 JFMCs and they were implemented.

(i) List of important Registers/Records maintained by and available with:

- (a) Plantation journal, Nursery, cash book, measurement book, stock register and Meeting Register.
- (b) FDA's meeting register, cash book, stock register

B.3.4 Capacity Building:

Training of JFMC/community participation conducted.

It is as follows:

Table 2.13: Capacity Building Programme

| Training programme conducted Staff: | |
|-------------------------------------|---|
| Number trained | 51 |
| Topics covered | JFM nursery technique, Afforestation activity and people participation |
| Community: | |
| Number trained | 768 |
| Topics covered | JFM nursery technique, afforestation activities and people participation. |
| Organization involved (Trainers) | Officials of Forest department. |

Table 2.14: Year-wise Expenditure (Rs.in lakh) incurred on Training Activities

| Year | | | | | Total Expenditure | |
|---------|---------|---------|----------|---------|-------------------|--|
| 2000-01 | 2001-02 | 2002-03 | 2003-04 | 2004-05 | Total Expenditure | |
| - | 7.93 | | <u>-</u> | - | 7.93 | |

Source: Social Forestry Division, FDA, Firozabad.

B.3.5 Monitoring and Evaluation:

No. of Inspection by

| (i) | Chief Conservator of Forest | 05 |
|-------|------------------------------|-----|
| (ii) | Conservator of Forest | 10 |
| (iii) | Deputy Conservator of Forest | 120 |

Whether FDA conducted by the regular Monitoring and Evaluation of project activities? Yes

Monitoring and evaluation has been carried out by the State Government/Project Development Agency at regular intervals by different officials. The expenditure incurred in monitoring and evaluation until March 31, 2004 had been carried out by FDA.

Table 2.15: Year-wise expenditure incurred (Rs. in lakh) on Monitoring and Evaluation

| | | Total Expenditure | | | |
|---------|---------|-------------------|---------|---------|-----------------|
| 2000-01 | 2001-02 | 2002-03 | 2003-04 | 2004-05 | Total Emponence |
| _ | - | 3.29 | - | - | 3.29 |

Source: Social Forestry Division, FDA, Firozabad.

Were any independent agencies involved in above monitoring process?

No

If yes, provide the list of agencies and copies of reports and main findings/recommendations

N.A.

Frequency of monitoring and evaluation? N.A.

Number of such activities carried out in each F.Y.

Table 2.16: Year wise Monitoring and Evaluation by Independent Agencies

| Year-I | Year-2 | Year-3 | Total |
|--------|--------|--------|-------|
| Nil | Nil | Nil | Nil |

Source: Social Forestry Division, FDA, Firozabad.

CHAPTER III

FDA MECHANISM

The FDA mechanism alongwith its strength and weakness and other details have been discussed in this chapter.

Outline the constitutions of FDA i.e. composition of general and executive bodies, along with deviation, if any, reasons there of, and concurrence of MoEF thereto.

FDA Firozabad was registered under Societies Registration Act of 1860 (XXI) on October 21, 2000 at district head quarter, Firozabad. Guidelines prescribed by NAEB/MoEF, Government of India were followed during composition of general body and executive body meetings of the FDA. As per observations and information from officials, no deviation was found in the composition of general and executive bodies.

Highlight the strengths and weakness, if any, pertaining to mutual responsibilities assigned to FDA.

Strength: FDA Firozabad has created a good network in the field, villagers cooperate with the forest officials. FDA officials are always alert and keep the vigil in protecting the forest resources from any kind of damage. EPA has created extreme enthusiasm among the villagers to make the afforestation scheme a success. Species of plants which are chosen are quite suitable in such a harsh geographical conditions. If the plantation continuously survive, it may improve the entire eco-system

Weakness: The entire eco-system is extremely degraded. Climate is harsh and dry, plant growth is slow, rainfall is meager and erratic, ground water level has gone down beyond 200 feet, soil is infertile, neelgai are constant danger for saplings, due to calcareous soils ravines are constantly increasing and villagers are extremely poor, heavily depend upon forest resources. Protection of plants for longer period is quite essential.

> Comment on whether the project implementing VFCs/EDCs also being benefited through any other forestry/community development project from state/central government.

State level afforestation projects especially on reserved forest land were benefiting the community people of target villages as reported by JFMC officials. These were Social Forestry Programme and Twenty Point Programme.

Provide the brief outline of FDA bank account of operation, auditing status supported with progress of work as envisaged in the guidelines. Comment on the flow of funds to the VFCs/EDCs. Distribution of funds by JFMCs for work executed. If delayed, reasons thereof?

The bank account of the FDA was with Central Bank of India, Firozabad and the account number was 1280 operated by the Chairman (CF) and Member Secretary/CEO (DCF). Audit report of all the years 2000-01, 2201-02, 2002-03, 2003-04 and 2004-05 were submitted to the concerned departments. Flow of funds from FDA to JFMC had been quite smooth. No where delay was found.

Similar details should also be provided for the individual VFC/EDC whose works were assessed and interactions held with. Details of statement of account and progress reports sent by VFC/EDC to the FDA. Comment on the receipt of funds by VFCs/EDCs.

Eight JFMCs were physically surveyed and verified namely Chandvar, Basai Mohammadpur, Anandipur Karkoli, Allahdadpur, Dhirpura, Gurkuan, Niyamatpur and Rasoolabad. Their bank accounts were opened as follows:

Table 2.16: Bank Account of 10% Sample of Total JFMC Villages Surveyed

| SL. NO | Name of Village | Bank Name | A/c Number |
|-----------|-------------------|----------------------------------|------------|
| 1. | Chandvar | Central Bank of India, Ferozabad | 15769 |
| 2. | Basai Mohammadpur | Central Bank of India, Ferozabad | 15766 |
| 3. | Anandipur Karkoli | Central Bank of India, Ferozabad | 15768 |
| 4. | Allah Dadpur | Central Bank of India, Ferozabad | 15770 |
| 5. | Dhirpura | Central Bank of India, Tundla | 30603 |
| 6. | Gurkuan | Central Bank of India, Tundla | 30606 |
| 7. | Niyamatpur | Central Bank of India, Tundla | 30608 |
| 8. | Rasoolabad | Central Bank of India, Tundla | 30605 |

Source: Social Forestry Division, FDA, Firozabad.

Expenditure in VFCs is quite good. Receipt of JFMCs through FDA had been also quite satisfactory.

CHAPTER IV

QUANTITATIVE ANALYSIS AND FINDINGS

In this chapter qualitative analysis and findings are made like assessment of plantation, survival rate, increased and availability of fuelwood, fodder, NTFPs, timber etc. Also about participation, protection and maintenance of assets created, maintenance of records, benefits accrued to the community etc.

C.1 Assessment of Plantations, SMC works and their Output:

1. Brief comment on suitability of areas selected for project implementation:

The entire afforestation work was carried out on forest land which was extremely deforested due to heavy dependence of villagers thus the entire land was eroded and converted into ravines. Blank patches of the forest was treated in this project. When the ground is dry, drought resistant species of plants have germinated well and plants have come up. Despite of slow growth plants have formed a substantial greenery and moisture has definitely increased.

2. Assessment of work as seen in the field including quality of work.

The quality of plantation was good in artificial regeneration which was carried out in VFCs, as observed in the field.

3. Survival rate (estimated statistically, indicating the methodology adopted and average height of plants).

While surveying in the field it was found that the survival rate was quite satisfactory. Average survival rate of plants was found about 70.00 per cent. The survival rate was assessed in a sample area of about 01 hectare in a surveyed JFMC at the plantation site. The average height of the plants was found (depending upon type of specey and availability of moisture) between 7 to 15.

4. Assessment of regeneration/rehabilitation status of degraded lands treated:

On degraded lands under reserve forests, the regeneration/ rehabilitation of plants was done quite skillfully and satisfactorily. The growth of plants and survival rate was found satisfactory. However maintenance work should further continue.

5. Technology used in the project: Technology or methodology adopted under each of the components sanctioned by NAEB. An analysis of the technology used and its effectiveness in brief.

Technology or methodology was adopted according to NAEB guidelines under each of the components. Staggered contour trenches of size 3.00 m. x 0.60 m. x 0.45 m. spread 3 m apart in a row are dug. Sowing of seeds of trees of local importance are done in two rows at a distance of 15cm apart on the ridges at the lower side of the contour trenches. In pits plants are grown in poly-bags. The forest official and the villagers were satisfied with the methods of plantation.

6. Increase in availability of biomass (fuel wood, fodder, NTFPs, small timber etc.)

After 5 years of plantation huge biomass has developed. Since most of the plantation is done by Juliflora according to local climatic and soil condition, which is not suitable for timber purposes. It is already providing the fuel wood. If villagers are lopping the branches, then no problem, but occasionally plants are axed from root which is serious. Neem and Sheesham plants are the good source of hard timber, which would take time to mature. Biomass in the form of grass is sufficiently available, if it is restricted upto controlled grazing and new plants are not harmed, then it is hoped that the villagers would continue to enjoy a good eco-system.

7. Improvement of quality of life of people in project area (status of health and education, availability of drinking water, increase in per capita income).

Quality of life of people living in project area has definitely improved as the soil erosion has decreased, expansion of ravines has been checked upto certain extent, check-dams are increasing soil moisture and recharging the ground water, fuel and fodder is easily available etc. Under EPA handpumps and ponds have solved the drinking water problem of men and animals. Similarly Bus stands have eased the problems of passengers. Project has provided livelihood during 2001-02 to 2004-05 of 473,556 mandays employment.

C.2 PEOPLE'S PARTICIPATION:

1. Whether the choice of species has been decided in consultation with the local people.

Also please comment briefly whether these are in consonance within the local needs.

Through local participation, each micro-plan was prepared and they had decided with the help of local forester the species to be planted. While selecting the plant species, the soil moisture and climatic conditions were taken into account alongwith the local needs of population. Growth and survival potential of individual species was also a factor of selection of species.

2. Briefly comment on the suitability of species taken up for NTFP and medicinal plants (perennials) from economic point of view.

Important NTFP species having medicinal and economic value had been planted in consonance with the local needs.

3. Whether the project has created awareness among the local population about the responsibilities they expected to discharge and the benefits that are likely to accrue from the project.

Of course, tremendous interest has been generated among the local population regarding the usefulness of forests, their protection, management and distribution of usufruct among themselves.

4. Approach adopted by the project authorities for motivating the public?

Regular meetings through PRA were organised by FDA to motivate local population. Jointly formed JFMCs. VFCs by forest officials and local representatives have made the afforestation project quite successful. EPA is another attraction for the entire villagers, who enabled the project implementation a success.

5. Whether the means of communication adopted have been successful and have there been a favourable response?

The PRA was adopted by the forest officials with the full dedications had been quite successful which created enthusiasm and feeling of belonging among local population towards afforestation and protection.

6. Whether the village communities have been involved in:

| (a) | project planning | Yes |
|-----|---|-----|
| (b) | project implementation | Yes |
| (c) | Usufructs sharing mechanism | Yes |
| (d) | Are the people aware of GO issued (if any) with | Yes |
| , , | regard to JFM/usufruct sharing mechanism? | |
| (e) | Has any formal arrangement been evolved for sharing | Yes |
| , , | intermediate and final produce of the project activities? | |

(f) Evaluation and comments on the effectiveness of the mechanism evolved and the equitableness of the same.

Yes, the mechanism was quite effective and overall equitable.

Yes, by mutual understanding only for equal and judicious sharing.

(g) What role has been played by the local community/committee in arriving at the mechanism?

Villagers have also contributed with their opinion, which were well taken by the local community/committee while implementing the project.

C.3 ASSETS: PROTECTION AND MAINTENANCE:

What measures have been need for protecting the assets created in the project? State the quality and quantity of measures adopted and their effectiveness. The evaluator may state whether in spite of measures the plantations are subjected to grazing or other biotic damages. Whether these issues were placed before the Village Forest Committee? If so, with what results. If not, why? Whether the VFC has been effective in sorting out these issues?

During the project 2000-01 to 2004-05 temporary watchmen were appointed to protect the plants and to restrict unregulated grazing. Forest officials and VFC members have experienced concern regarding the meager salary and wages recommended by the government. Due to less payment of salary and wages than the desired, watchmen did not seriously took up the job. However, forest officials and VFC members were serious in protecting the assets. It is high time to raise the amount of wages and salary of watchmen and at least maintenance work should be allowed to continue. There is a scope to continue the afforestation programme in other areas alongwith EPA, so that over all eco-development process and involvement of local population should continue. Extended maintenance is highly recommended because mischievous elements damage and cut the plants from very root for their greed when they find the forest is alone. Village Forest Committees are helpless on such occasional criminal activities.

C.4 MAINTENANCE OF RECORDS:

(a) Whether records of nurseries indicating the number and species of seedlings raised has been maintained?

Yes, the records of nurseries were fully maintained

(b) Whether these are adequate and posted from time to time? If not, the reasons and effect of unposted records on the implementation of project.

Yes.

(c) Whether plantation journals have been maintained and posted upto data? Whether a surveyed sketch of the plantation has been pasted on the register?

Yes.

(d) Whether inspecting officials of the implementing agency like DFO or CCF has recorded their observations/comments, if any?

Yes.

(e) Whether record/register of VFC/FDA General Body and Executive Body Meetings maintained?

Yes.

C.5 PROJECT BENEFITS

1. Comment on whether implementing authorities have quantified the tangible and intangible benefits? Which the regenerated areas would be able to offer to the local people? Or else, a suitable and appropriate system to forecast, evaluate and monitor such benefits is being developed. If not, then reasons thereof.

Implementing authorities have quantified and calculated the tangible benefits from this project. Local community has been made aware of the intangible benefits like soil and moisture conservation, conservation of bio-diversity and recharging the ground water.

2. Provide a brief outline of the employment generated (mandays) by the project activities, especially afforestation, SMC works and entry point activities in each VFC/EDC. Also comment on the extent of such benefits having gone directly to the local women/SCs/STs?

The employment generated was about 473,556 mandays. Benefits gone to local SC/ST women are about 10.00 per cent.

C.6 PROJECT REPORTING ACTIVITIES

(a) What returns (reports) have been submitted by the implementing agency to the State/Central Government? Whether these reports were sent regularly on due dates? If not, the reasons thereof?

All progress and audit reports in total and at VFC level are being submitted to the Central Government and State Government on stipulated time intervals.

(b) Whether any State level agency has monitored project activities? If so, the outcome of such monitoring/evaluations and the comments, if any?

No

(c) If no agency evaluated project activities, reasons thereof?

Only, now Giri Institute of Development Studies, Lucknow on request of State Government is evaluating the project activities.

CHAPTER V

CONSTRAINTS AND LIMITATIONS OF PROJECT

(a) What constraints/limitations were faced by the project authorities, if any?

Initially funds from Central Government were not released timely to FDA, of course later on it was released smoothly. Government approved wages and salaries were less, which created problems to hire the forest guards. Duration of maintenance of plants is not sufficient, which should be extended.

(b) Whether the fund flow was smooth and without delays?

Yes

- (c) If flow was not smooth, where did the delay arise? This must be checked with records.

 Delay was reported from Central Government side.
- (d) Whether the project authorities made adequate efforts to get the funds released on time?

Yes

CHAPTER VI

SUGGESTIONS AND RECOMMENDATIONS

D.1 FROM IMPLEMENTING AGENCY

(a) Whether there is any scope for improving the project output?

Yes, project period should be of 10 years and extra provision of funds should be made for better and long lasting results.

(b) Whether the project authorities have felt any need for improving upon any particular activity methodology?

Yes, provision should be made for watchmen to guard the plantation for longer period.

(c) Whether the people of the area feel any need to improve any particular aspect of the project?

More adjoining land of afforested area should be brought under the afforestation scheme and EPA should be further extended in the villages.

D.2 FROM EVALUATION AGENCY

(a) Whether the project should be continued/modified/discontinued (give reasons)?

Yes, the project should be continued as it has created an effective forest cover, conservation of soil and moisture, biomass for fuel and fodder. It created awareness among local population for their responsibilities in managing and protecting the forest resources and hope for future benefits from health forests. There is no need of modifying the existing project mechanism.

(b) Any other relevant recommendation(s):

It would be wise if we involve religious institutions in plantation, management and protection of forests, for continued involvement of communities. Religion is a power of common people, it should be diverted towards positive activities, then there would be competition among communities to make their forest healthy. Temples, Dharmshalas, Pathshalas, Muths, Gurudwaras, Mosques, Dargah, Khanqah (Muth), Madrasa, Church, etc. are the established respected and trusted traditional NGOs, with which every Indian is sentimentally linked, they

should be entrusted the plantation and maintenance of their neighbouring forest lands. Surely there would be tremendous growth of forests with little money and manpower, as everything of forest would be taken by the communities religiously.

(d) Names and designation of functionaries (DCF, CF, CCF) with whom evaluator has interacted post evaluation appraisal – summary of discussions with the officers to be given.

Discussion was held with Mr. M.R.P. Rao, DFO and with all the six rangers, Mr. T.S. Yadava (Firozabad Range), Mr. S.N. Yadava (Shikohabad Range), Mr. R.D. Singh (Tundla Range), Mr. V. Kumar (Sirsa Range), Mr. S.P. Singh (Jasrana Range) and Mr. S. Husain (Narkhi Range) and other staff of Forest Department. They briefed the evaluator regarding the salient features of the project and methodology adopted for implementation of afforestation programme. Main emphasis of local staff was on creating awareness and trust building among local people in which they were quite successful.



सोसाइटी-रजिस्ट्रीकर का



प्रमाण-पत्र

(अधिनियम संख्या 21,1860 के अधीन)

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किंतिजाबाद पता- का भी खम प्रमाणीय निरंदाक,

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को आज उत्तर प्रदेश में अपनी प्रवृत्ति के संबंध में यथासंशोधित सोसाइटीज रिजस्ट्रेशन अधिनियम्, 1860 ई० के अधीन सम्यक् रूप से रिजस्ट्रीकृत किया गया है। यह प्रमाण-पत्र

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